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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/911,844	07/24/2001	David Pierre Gendron	1027-001US01	3911
38356	7590	10/25/2006		
BROOKS & CAMERON, PLLC 1221 NICOLLET MALL #500 MINNEAPOLIS, MN 55403				
			EXAMINER MEUCCI, MICHAEL D	
			ART UNIT 2142	PAPER NUMBER

DATE MAILED: 10/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/911,844

Applicant(s)

GENDRON ET AL.

Examiner

Michael D. Meucci

Art Unit

2142

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This application has been reassigned to Michael Meucci.
2. This action is in response to the Request for Continued Examination (RCE) filed 12 June 2006.
3. Claims 1-20 remain pending. Claims 21-40 are cancelled.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 12 and 13 are rejected under 35 U.S.C. 101 because they are directed towards non-functional descriptive material (i.e., routing information). The claimed "computer-readable medium storing data" is considered non-functional because the storage of data on a computer readable medium does not constitute any type of method-steps invoking action by the system. Correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-2, 7, 12, and 14-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Cooke et al. (U.S. 6,574,629).

As to claim 1, Cooke discloses a method comprising: storing routing information mapping destinations to routes within a network [a user input information of routing pattern in the form shown in Fig. 7, the routing pattern associated with routing destinations (col. 17; lines 52-60), the routing pattern is added to the routing rule in the table to the network gateway (col. 18, line 2-3, col. 19, lines 2- 5) (i.e. stored in the Gateway)], storing a set of routing rules (col. 18; line 2-6)], receiving a network communication comprising DICOM command with a DICOM tag describing an asset [line 65 of column 9 through line 6 of column 10 and lines 13-25 of column 17], comparing at least a portion of the DICOM tag to the set of routing rules (lines 3-28 of column 10), selecting a route from the routing information based on the destination information of the network communication and a result of the comparison [col. 16, lines 62-65, col. 18; lines 7-16, lines 41-53], the images (network communication) are routed to appropriate location based on a predetermined rules (col. 15, lines 60-65), communicating with a device on the route based on the DICOM command (lines 3-28 of column 10 and lines 13-25 of column 17), receiving results from the communicating with the device on the route based on the DICOM command (lines 22-28 of column 10), and returning the network communications with the results (lines 44-60 of column 17).

As to claim 2, Cooke further discloses: storing routing information comprises storing routing information mapping Application" Entity Names (AENames) to routes within the medical imaging network [Fig. 7 shows a routing form that is used to assign a

routing name to the imaging modalities and provide other information to the PACS.

Table 81 includes a field mapping input 86 where a DICOM mapping of an accession number or patient ID is inputted and an input for a "Broker AE title" the broker as defined in col. 12, line 66 is a gateway i.e. a "gateway AE title" to enter the accession number associated with the image or study produced by the imaging modality and being routed and routing pattern input 90 to input the routing associated with the imaging modality. It is clear that the routing table 81 is associating or linking (mapping) a gateway AE title accession number associated with the image or study produced by the imaging modality and is being routed (entry 94) with a DICOM mapping of the accession number (entry 86) with a routing pattern (entry 90)].

Claim 7 is a broader version of claim 1, and is rejected for the same reasons indicated in claim 1.

As to claim 12, refer to claim 2 rejection.

As to claim 14, refer to claim 1 rejection.

Cooke further discloses a computer readable medium (Fig. 2).

As to claim 15, refer to claim 2 rejection.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 3, 8, 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cooke et al. [US. Pat.No. 6,574,629] as applied to claims 2, 7,15 above and further in view of F. Fioravanti et al. "The Organization and Management of a Wide Environment of DICOM Compliant Device: the DICOM Domain Management Service Class", IEEE, pp.20-25,1998. As to claim 3, Cooke discloses using application Entity (AE) titles (Fig. 7) and IP routing capabilities (col. 15, lines 45-46). Cooke does not disclose wherein selecting a route from the routing information comprises comparing an AENAME defined within the network communication to the AENAME defined within the routing information.

Fioravanti discloses a system for organizing DICOM services in a hospital structure by identifying DICOM devices that communicate with each other through An AE title (Application entity) title which organize the structure in domains (Page 21, RC, lines 1-14). DICOM application entities are able to communicate with each other through an AE title can communicate by checking the AE titles and the IP address (p.23, Lc, lines 14-25). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Fioravanti's teachings to modify the method of Cooke by checking AE title in the network communication with AE title within routing information in order to manage and organize a large number of devices and for handling a valid security policy.

As to claim 8, refer to claim 3 rejection.

As to claim 16, refer to claim 3 rejection. 7.

9. Claims 4, 9, 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cooke et al. [US. Pat.No. 6,574,629] as applied to claims 1,7, 14 and in view of Rothschild et al. [Pub. No. 2002/0016718 A1].

10. As to claim 4, Cooke discloses where comparing at least a portion of the DICOM tag comprises: parsing the medical imaging data and assessing a routing rule from the set of routing rules based on the DICOM (col. 17, lines 13-25). Cooke does not disclose a set of DICOM tags and corresponding data. Rothschild discloses a medical image manage system and method that uses a Central data management system to centrally manage the storage and transmission of electronic records containing medical images (col. 5, [0036-0037]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Rothschild's teachings to modify the method of Cooke by using a set of DICOM tags in order to electronically transport medical images efficiently.

As to claim 9, refer to claim 4 rejection.

As to claim 17, refer to claim 4 rejection.

11. Claims 5-6, 10-11, 13,18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cooke et al. [US. Pat.No. 6,574,629] as applied to claims 1,7 above and further in view of Stephen T.C Wong et al. "A Digital Library for Biomedical Imaging on the Internet." IEEE, pp. 84-91, 1999.

As to claim 5, Cooke discloses storing a set of routing rules comprises storing an XML-based set of rules, wherein the rules conform to a user-defined grammar for

Art Unit: 2142

routing the medical imaging data [As shown in 11 the routing rules are added to routing table (stored) by a user defined grammar], Cooke using HTML based rules (col. 17, lines 1-5). Cooke does not disclose XML based set of rules. Wong discloses an DICOM system for medical images that uses XML to further enhance browser capabilities by providing user defined types (p. 87, Lc, lines 8-21). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Wong's teachings to modify the method of Cooke by XML Based rules in order to enhance browser capabilities by providing user defined types.

As to claim 6, Cooke further discloses further comprising presenting an interface for receiving user input that defines the user-defined grammar [the form displayed to the user to enter and modify rules in Fig. 11, is an interface receiving user input].

As to claim 10, refer to claim 5 rejection.

As to claim 11 refer to claim 6 rejection.

As to claim 13, refer to claim 5 rejection.

As to claim 18, refer to claim 5 rejection.

As to claim 19, refer to claim 6 rejection.

As to claim 20, Cooke further discloses wherein the user input defines tags including a patient identifier, an imaging modality [patient ID (col. 17, lines 50-51) imaging modality (Fig. 11)].

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Rothschild et al. (U.S. 6,678,703 B2) discloses medical image management system and DICOM.

Killcommons (U.S. 7,028,182 B1) discloses secure network system for transfer of medical information and DICOM.

Samari-Kemani (U.S. 2002/0085476 A1) discloses medical data recording system and DICOM.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Meucci at (571) 272-3892. The examiner can normally be reached on Monday-Friday from 9:00 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell, can be reached at (571) 272-3868. The fax phone number for this Group is 571-273-8300.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [michael.meucci@uspto.gov].

All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record

includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



ANDREW CALDWELL
SENIOR PATENT EXAMINER